IN THE CLAIMS

Please cancel claims 1-24 without prejudice or disclaimer, and substitute new claims 25-48 therefor as follows:

Claims 1-24 (Cancelled).

25. (New) A method for estimating the field received starting from at least one source of electromagnetic field in a determined position of the territory covered by a communication network comprising a plurality of sources of electromagnetic field, said method comprising the step of estimating said field on the basis of a propagation model and defining said propagation model according to the topologic characteristics of the sources of electromagnetic field of said plurality of sources of electromagnetic field in proximity to said determined position of the territory.

26. (New) The method as claimed in claim 25, comprising the steps of:

identifying at least one parameter identifying said topologic characteristics, said parameter having a respective range of variability;

subdividing said range of variability of said parameter into a plurality of intervals; and

using, to estimate said electromagnetic field, a different propagation model for each of said ranges of said plurality.

27. (New) The method as claimed in claim 25 comprising the steps of:

identifying at least one parameter identifying said topologic characteristics; and

estimating said electromagnetic field by using a single propagation model, said single propagation model being modified in parametric fashion as a function of the value of said parameter (Δ) identifying said topologic characteristics.

28. (New) A method as claimed in claim 27, wherein said single propagation model is of the type

$$L_p = 10 \bullet \log_{10}\left[\left(\frac{4\pi R}{\lambda}\right)^n\right]$$

where L_p is the attenuation coefficient, R is the distance between said determined position and said at least one source of electromagnetic field, and is the wavelength of said electromagnetic field and n is an exponent function of said parameter identifying the topologic characteristics of said network.

29. (New) The method as claimed in claim 27, wherein said single propagation model is a function of an index (n) linked to said at least one parameter (Δ) by a relationship of the type

$$n=A-B\bullet\log(d\_net),$$

where n is said index, d_net=Δ is said parameter identifying the topologic characteristics of said network, and A and B are scaling constants.

30. (New) The method as claimed in claim 25, applied to a cellular communication network, comprising the step of modifying said propagation model according to a parameter identifying the density of the cells of said cellular network.

31. (New) The method as claimed in claim 25, applied to a cellular communication network, comprising the step of modifying said propagation model

according to a parameter identifying the distance of said determined position with respect to the source of electromagnetic field of said plurality of sources of electromagnetic field that is closest to said determined position.

32. (New) The method as claimed in claim 31, comprising the steps of:

associating to each cell of said cellular network a reference distance representing the distribution of the sources of electromagnetic field of said plurality of sources of electromagnetic field;

associating to said determined position a cell distance identifying the distance between said determined position and the source of electromagnetic field of said plurality of sources of electromagnetic field that is closest to said determined position; and

identifying said parameter which identifies the topologic characteristics of said network as the greater value between said cell distance and a multiple of said reference distance.

33. (New) A system for estimating the field received starting from at least one source of electromagnetic field in a determined position of the territory covered by a communication network comprising a plurality of sources of electromagnetic field, said system comprising at least one processing unit configured to estimate said field on the basis of a propagation model that is modifiable according to the topologic characteristics of the sources of electromagnetic field of said plurality of sources of electromagnetic field in proximity to said determined position of territory.

34. (New) The system as claimed in claim 33, wherein said at least one processing unit is configured to:

identify at least one parameter (Δ) identifying said topologic characteristics, said parameter (Δ) having a respective range of variability;

subdivide said range of variability of said parameter (Δ) into a plurality of intervals; and

use a different propagation model for each of said intervals of said plurality to estimate said electromagnetic field.

35. (New) The system as claimed in claim 33, wherein said at least one processing unit is configured to:

identify at least one parameter (Δ) identifying said topologic characteristics, and

estimate said electromagnetic field by using a single propagation model, said single propagation model being modified in parametric fashion according to the value of said parameter (Δ) identifying said topologic characteristics.

36. (New) The system as claimed in claim 35, wherein said single propagation model is of the type

$$L_p = 10 \bullet \log_{10}\left[\left(\frac{4\pi R}{\lambda}\right)^n\right]$$

where L_p is the attenuation coefficient, R is the distance between said determined position and said at least a source of electromagnetic field and is the

wavelength of said electromagnetic field and n is an exponent function of said parameter (Δ) identifying the topologic characteristics of said network.

37. (New) The system as claimed in claim 35, wherein said single propagation model is a function of an index (n) linked to said at least one parameter (Δ) by a relationship of the type

n=A-B.log(d_net),

where n is said index, d_net=Δ is said parameter identifying the topologic characteristics of said network, and A and B are scaling constants.

38. (New) The system as claimed in claim 33, associated with a cellular communication network wherein said at least one processing unit is configured to modify said propagation model according to a parameter identifying the cell density of said cellular network.

39. (New) The system as claimed in claim 33, associated with a cellular communication network wherein said at least one processing unit is configured to modify said propagation model according to a parameter (Δ) identifying the distance of said determined position from the source of electromagnetic field of said plurality of sources of electromagnetic field that is closest to said determined position.

40. (New) The system as claimed in claim 39, wherein said at least one processing unit is configured to:

associate to each cell of said cellular network a reference distance representing the distribution of the sources of electromagnetic field of said plurality of sources of electromagnetic field,

associate to said determined position a cell distance identifying the distance between said determined position and the source of electromagnetic field of said plurality of sources of electromagnetic field that is closest to said determined position; and

identify said parameter (Δ) identifying the topologic characteristics of said network as the greater value between said cell distance and a multiple of said reference distance.

41. (New) A communication network incorporating a system as claimed in claim 33.

42. (New) A network as claimed in claim 41, wherein the network is for mobile communications.

43. (New) A communication network resulting from the application of the method as claimed in claim 25.

44. (New) A communication network terminal comprising a processing unit configured to implement the method as claimed in claim 25.

45. (New) A method for simulating a mobile radio network able to use a simulation of the physical layer of the network, comprising a method for estimating the field as claimed in claim 25.

46. (New) A method for planning a mobile radio network, comprising a method for estimating the field as claimed in claim 25.

47. (New) A method for locating mobile terminals in a mobile radio network, comprising estimating the field as claimed in claim 25.

48. (New) A computer program product able to be loaded into the memory of at least one electronic computer and comprising portions of software code capable of implementing the method as claimed in claim 25.